

AMENDMENTS TO THE CLAIMS

Please amend Claims 131, 135, 144, 148, 157, 161, 170, 174, 183, 187, 196, 200, 209, 213, 222, 226, 235, 239, 243, 246, 248, 252, 256, 258, 259, 261, 265, 269, 271, 272, 274, 278, 282, 284, and 285 as follows:

1-18. (Canceled)

19-64. (Canceled)

65-130. (Canceled)

131. (Previously Amended) A method for storage and display of multimedia data, comprising the steps of:

concurrently receiving at least two digital television streams;

extracting from the at least two digital television streams, MPEG streams that

contain a plurality of video frames and time stamps associated with the video frames;

identifying starting locations of video frames within the MPEG streams and time stamps associated with video frames;

concurrently storing on a storage device the MPEG streams, starting locations of

video frames within the MPEG streams and time stamps associated with the

video frames, the storage device additionally containing a plurality of

previously stored MPEG streams, starting locations of video frames within

each of the previously stored MPEG streams and time stamps associated with

the video frames within each of the previously stored MPEG streams;

accepting a user control command;

in response to the user control command, selecting a particular video frame from

within a particular MPEG stream stored on the storage device using a time

stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage on the storage device of the MPEG streams;

retrieving the selected particular video frame using a stored starting location of the selected particular video frame; and  
sending the selected particular video frame for display.

132. (Previously presented) The method of Claim 131, wherein the particular video frame is a video I-frame.

133. (Previously presented) The method of Claim 131, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to the user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the user control command.

134. (Previously presented) The method of Claim 131, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to a second user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the second user control command.

135. (Currently Amended) The method of Claim 131, wherein the selecting step ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

136. (Previously presented) The method of Claim 131, wherein the extracting step extracts an MPEG stream based on a user control command.

137. (Previously presented) The method of Claim 131, wherein the extracting step extracts an MPEG stream based on date and time.

138. (Previously presented) The method of Claim 131, wherein the extracting step extracts an MPEG stream based on a particular word or particular phrase in the digital television stream.

139. (Previously presented) The method of Claim 131, wherein the storing step further comprises:

switching to a second storage device for MPEG stream storage.

140. (Previously presented) The method of Claim 131, wherein the receiving step further comprises:

switching to a second digital television stream.

141. (Previously presented) The method of Claim 131, wherein the selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the retrieving step further comprises:

retrieving the selected second particular video frame;

and wherein the sending step further comprises:

sending the selected particular video frame and the selected second particular video frame to different destinations for display.

142. (Previously presented) The method of Claim 131, wherein the selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the retrieving step further comprises:

retrieving the selected second particular video frame;

and wherein the sending step further comprises:

sending the selected particular video frame and the selected second particular video frame to different areas within a display.

143. (Previously presented) The method of Claim 131, wherein the storage device is a hard disk.

144. (Currently Amended) A method for storage and display of multimedia data, comprising the steps of:

concurrently receiving at least two digital television streams;

extracting from the at least two digital television streams, MPEG streams that

contain a plurality of video and audio frames and time stamps associated with the video and audio frames;

identifying starting locations of video frames within the MPEG streams and time stamps associated with video frames;

concurrently storing on a storage device the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

accepting a user control command;

in response to the user control command, selecting a particular video frame from within a particular MPEG stream stored on the storage device using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage on the storage device of the MPEG streams;

selecting a corresponding audio frame from within the particular MPEG stream that corresponds to the particular video frame;

retrieving the selected particular video frame using a stored starting location of the selected particular video frame;

retrieving the selected corresponding audio frame from the particular MPEG stream;  
and  
sending the selected particular video frame and selected corresponding audio frame  
for playback.

145. (Previously presented) The method of Claim 144, wherein the particular video frame is a video I-frame.

146. (Previously presented) The method of Claim 144, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to the user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the user control command.

147. (Previously presented) The method of Claim 144, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to a second user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the second user control command.

148. (Currently Amended) The method of Claim 144, wherein the video frame selecting step ~~substitutes a second storage device for the storage device and~~ selects a particular video

frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

149. (Previously presented) The method of Claim 144, wherein the extracting step extracts an MPEG stream based on a user control command.

150. (Previously presented) The method of Claim 144, wherein the extracting step extracts an MPEG stream based on date and time.

151. (Previously presented) The method of Claim 144, wherein the extracting step extracts an MPEG stream based on a particular word or particular phrase in the digital television stream.

152. (Previously presented) The method of Claim 144, wherein the storing step further comprises:

switching to a second storage device for MPEG stream storage.

153. (Previously presented) The method of Claim 144, wherein the receiving step further comprises:

switching to a second digital television stream.

154. (Previously presented) The method of Claim 144, wherein the video frame selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the audio frame selecting step further comprises:

selecting a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame;

wherein the video frame retrieving step further comprises:

retrieving the selected second particular video frame;

wherein the audio frame retrieving step further comprises:

retrieving the selected second corresponding audio frame;

and wherein the sending step further comprises:

sending the selected particular video frame and the selected second particular video frame to different destinations for display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

155. (Previously presented) The method of Claim 144, wherein the video frame selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the audio frame selecting step further comprises:

selecting a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame;

wherein the video frame retrieving step further comprises:

retrieving the selected second particular video frame;

wherein the audio frame retrieving step further comprises:



retrieving the selected second corresponding audio frame;  
and wherein the sending step further comprises:  
sending the selected particular video frame and the selected second particular video frame to different areas within a display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

156. (Previously presented) The method of Claim 144, wherein the storage device is a hard disk.

157. (Currently Amended) A method for storage and display of multimedia data, comprising the steps of:

concurrently receiving at least two analog television signals;  
encoding from the at least two analog television signals, MPEG streams that contain a plurality of video frames and time stamps associated with the video frames;  
identifying starting locations of video frames within the MPEG streams and time stamps associated with video frames;  
concurrently storing on a storage device the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;  
accepting a user control command;

in response to the user control command, selecting a particular video frame from within a particular MPEG stream stored on the storage device using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage on the storage device of the MPEG streams;

retrieving the selected particular video frame using a stored starting location of the selected particular video frame; and  
sending the selected particular video frame for display.

158. (Previously presented) The method of Claim 157, wherein the particular video frame is a video I-frame.

159. (Previously presented) The method of Claim 157, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to the user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the user control command.

160. (Previously presented) The method of Claim 157, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to a second user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the second user control command.

161. (Currently Amended) The method of Claim 157, wherein the selecting step ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

162. (Previously presented) The method of Claim 157, wherein the extracting step extracts an MPEG stream based on a user control command.

163. (Previously presented) The method of Claim 157, wherein the extracting step extracts an MPEG stream based on date and time.

164. (Previously presented) The method of Claim 157, wherein the extracting step extracts an MPEG stream based on a particular word or particular phrase in the analog television signal.

165. (Previously presented) The method of Claim 157, wherein the storing step further comprises:

switching to a second storage device for MPEG stream storage.

166. (Previously presented) The method of Claim 157, wherein the receiving step further comprises:

switching to a second analog television signal.

167. (Previously presented) The method of Claim 157, wherein the selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the retrieving step further comprises:

retrieving the selected second particular video frame;

and wherein the sending step further comprises:

sending the selected particular video frame and the selected second particular video frame to different destinations for display.

168. (Previously presented) The method of Claim 157, wherein the selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the retrieving step further comprises:

retrieving the selected second particular video frame;

and wherein the sending step further comprises:

sending the selected particular video frame and the selected second particular video frame to different areas within a display.

169. (Previously presented) The method of Claim 157, wherein the storage device is a hard disk.

170. (Currently Amended) A method for storage and display of multimedia data, comprising the steps of:

concurrently receiving at least two analog television signals;

encoding from the at least two analog television signals, MPEG streams that contain a plurality of video and audio frames and time stamps associated with the video and audio frames;

identifying starting locations of video frames within the MPEG streams and time stamps associated with video frames;

concurrently storing on a storage device the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

accepting a user control command;

in response to the user control command, selecting a particular video frame from within a particular MPEG stream stored on the storage device using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage on the storage device of the MPEG streams;

selecting a corresponding audio frame from within the particular MPEG stream that corresponds to the particular video frame;

retrieving the selected particular video frame using a stored starting location of the selected particular video frame;

retrieving the selected corresponding audio frame from the particular MPEG stream;  
and  
sending the selected particular video frame and selected corresponding audio frame  
for playback.

171. (Previously presented) The method of Claim 170, wherein the particular video frame is a video I-frame.

172. (Previously presented) The method of Claim 170, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to the user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the user control command.

173. (Previously presented) The method of Claim 170, wherein the retrieving step further comprises:

adjusting video frame rate delivery for display of additional video frames in response to a second user control command; and

adjusting video frame retrieval direction from the particular MPEG stream in response to the second user control command.

174. (Currently Amended) The method of Claim 170, wherein the video frame selecting step ~~substitutes a second storage device for the storage device and~~ selects a particular video

frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

175. (Previously presented) The method of Claim 170, wherein the extracting step extracts an MPEG stream based on a user control command.

176. (Previously presented) The method of Claim 170, wherein the extracting step extracts an MPEG stream based on date and time.

177. (Previously presented) The method of Claim 170, wherein the extracting step extracts an MPEG stream based on a particular word or particular phrase in the analog television signal.

178. (Previously presented) The method of Claim 170, wherein the storing step further comprises:

switching to a second storage device for MPEG stream storage.

179. (Previously presented) The method of Claim 170, wherein the receiving step further comprises:

switching to a second analog television signal.

180. (Previously presented) The method of Claim 170, wherein the video frame selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the audio frame selecting step further comprises:

selecting a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame;

wherein the video frame retrieving step further comprises:

retrieving the selected second particular video frame;

wherein the audio frame retrieving step further comprises:

retrieving the selected second corresponding audio frame;

and wherein the sending step further comprises:

sending the selected particular video frame and the selected second particular video frame to different destinations for display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

181. (Previously presented) The method of Claim 170, wherein the video frame selecting step further comprises:

in response to a second user command, selecting a second particular video frame from a second MPEG stream stored on the storage device;

wherein the audio frame selecting step further comprises:

selecting a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame;

wherein the video frame retrieving step further comprises:

retrieving the selected second particular video frame;

wherein the audio frame retrieving step further comprises:



retrieving the selected second corresponding audio frame;  
and wherein the sending step further comprises:  
sending the selected particular video frame and the selected second particular video frame to different areas within a display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

182. (Previously presented) The method of Claim 170, wherein the storage device is a hard disk.

183. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

a receiver that concurrently receives at least two digital television streams;  
an extraction module, wherein the extraction module extracts from the at least two digital television streams, MPEG streams that contain a plurality of video frames and time stamps associated with the video frames;  
an identification module, wherein the identification module identifies starting locations of video frames within the MPEG streams and time stamps associated with video frames;  
a storage device for concurrently storing the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

a user control command module, wherein the user control command module accepts  
a user control command;

a selection module, wherein the selection module, in response to the user control  
command, selects a particular video frame from within a particular MPEG  
stream stored on the storage device using a time stamp stored on the storage  
device associated with the selected particular video frame essentially  
simultaneously with the concurrent storage of the MPEG streams on the  
storage device;

a retrieving module, wherein the retrieving module retrieves the selected particular  
video frame using a stored starting location of the selected particular video  
frame; and

a sending module, wherein the sending module sends the selected particular video  
frame for display.

184. (Previously presented) The apparatus of Claim 183, wherein the particular video  
frame is a video I-frame.

185. (Previously presented) The apparatus of Claim 183, wherein the retrieving module  
adjusts video frame rate delivery for display of additional video frames in response to the  
user control command; and adjusts video frame retrieval direction from the particular  
MPEG stream in response to the user control command.

186. (Previously presented) The apparatus of Claim 183, wherein the retrieving module  
adjusts video frame rate delivery for display of additional video frames in response to a

second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

187. (Currently Amended) The apparatus of Claim 183, wherein the selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

188. (Previously presented) The apparatus of Claim 183, wherein the extraction module extracts an MPEG stream based on a user control command.

189. (Previously presented) The apparatus of Claim 183, wherein the extraction module extracts an MPEG stream based on date and time.

190. (Previously presented) The apparatus of Claim 183, wherein the extraction module extracts an MPEG stream based on a particular word or particular phrase in the digital television stream.

191. (Previously presented) The apparatus of Claim 183, further comprising:  
a storage device switching module, wherein the storage device switching module switches to a second storage device for MPEG stream storage.

192. (Previously presented) The apparatus of Claim 183, wherein the receiver switches to a second digital television stream.

193. (Previously presented) The apparatus of Claim 183, wherein the selection module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the retrieving module retrieves the selected second particular video frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different destinations for display.

194. (Previously presented) The apparatus of Claim 183, wherein the selection module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the retrieving module retrieves the selected second particular video frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different areas within a display.

195. (Previously presented) The apparatus of Claim 183, wherein the storage device is a hard disk.

196. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

a receiver that concurrently receives at least two digital television streams;

an extraction module, wherein the extraction module extracts from the at least two

digital television streams, MPEG streams that contain a plurality of video and

audio frames and time stamps associated with the video and audio frames;

an identification module, wherein the identification module identifies starting locations of video frames within the MPEG streams and time stamps associated with video frames;

a storage device for concurrently storing the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

a user control command module, wherein the user control command module accepts a user control command;

a video frame selection module, wherein the video frame selection module, in response to the user control command, selects a particular video frame from within a particular MPEG stream stored on the storage device using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage of the MPEG streams on the storage device;

an audio frame selection module, wherein the audio frame selection module selects a corresponding audio frame from within the particular MPEG stream that corresponds to the particular video frame;

a video frame retrieving module, wherein the video frame retrieving module retrieves the selected particular video frame using a stored starting location of the selected particular video frame;

an audio frame retrieving module, wherein the audio frame retrieving module  
retrieves the selected corresponding audio frame from the particular MPEG  
stream; and  
a sending module, wherein the sending module sends the selected particular video  
frame and selected corresponding audio frame for playback.

197. (Previously presented) The apparatus of Claim 196, wherein the particular video  
frame is a video I-frame.

198. (Previously presented) The apparatus of Claim 196, wherein the retrieving module  
adjusts video frame rate delivery for display of additional video frames in response to the  
user control command; and adjusts video frame retrieval direction from the particular  
MPEG stream in response to the user control command.

199. (Previously presented) The apparatus of Claim 196, wherein the retrieving module  
adjusts video frame rate delivery for display of additional video frames in response to a  
second user control command; and adjusts video frame retrieval direction from the  
particular MPEG stream in response to the second user control command.

200. (Currently Amended) The apparatus of Claim 196, wherein the video frame  
selection module ~~substitutes a second storage device for the storage device and~~ selects a  
particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage  
device using a time stamp associated with the selected particular video frame.

201. (Previously presented) The apparatus of Claim 196, wherein the extraction module extracts an MPEG stream based on a user control command.

202. (Previously presented) The apparatus of Claim 196, wherein the extraction module extracts an MPEG stream based on date and time.

203. (Previously presented) The apparatus of Claim 196, wherein the extraction module extracts an MPEG stream based on a particular word or particular phrase in the digital television stream.

204. (Previously presented) The apparatus of Claim 196, further comprising:  
a storage device switching module, wherein the storage device switching module switches to a second storage device for MPEG stream storage.

205. (Previously presented) The apparatus of Claim 196, wherein the receiver switches to a second digital television stream.

206. (Previously presented) The apparatus of Claim 196, wherein the video frame selecting module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the audio frame selecting module selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving module retrieves the selected second particular video frame; wherein the audio frame retrieving module retrieves the selected second corresponding audio frame; and

wherein the sending module sends the selected particular video frame and the selected second particular video frame to different destinations for display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

207. (Previously presented) The apparatus of Claim 196, wherein the video frame selecting module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the audio frame selecting module selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving module retrieves the selected second particular video frame; wherein the audio frame retrieving module retrieves the selected second corresponding audio frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different areas within a display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

208. (Previously presented) The apparatus of Claim 196, wherein the storage device is a hard disk.

209. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

- a receiver that concurrently receives at least two analog television signals;
- an encoding module, wherein the encoding module encodes from the at least two analog television signals, MPEG streams that contain a plurality of video frames and time stamps associated with the video frames;



an identification module, wherein the identification module identifies starting locations of video frames within the MPEG streams and time stamps associated with video frames;

a storage device for concurrently storing the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

a user control command module, wherein the user control command module accepts a user control command;

a selection module, wherein the selection module, in response to the user control command, selects a particular video frame from within a particular MPEG stream stored on the storage device using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage of the MPEG streams on the storage device;

a retrieving module, wherein the retrieving module retrieves the selected particular video frame using a stored starting location of the selected particular video frame; and

a sending module, wherein the sending module sends the selected particular video frame for display.

210. (Previously presented) The apparatus of Claim 209, wherein the particular video frame is a video I-frame.

211. (Previously presented) The apparatus of Claim 209, wherein the retrieving module adjusts video frame rate delivery for display of additional video frames in response to the user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the user control command.

212. (Previously presented) The apparatus of Claim 209, wherein the retrieving module adjusts video frame rate delivery for display of additional video frames in response to a second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

213. (Currently Amended) The apparatus of Claim 209, wherein the selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

214. (Previously presented) The apparatus of Claim 209, wherein the extraction module extracts an MPEG stream based on a user control command.

215. (Previously presented) The apparatus of Claim 209, wherein the extraction module extracts an MPEG stream based on date and time.

216. (Previously presented) The apparatus of Claim 209, wherein the extraction module extracts an MPEG stream based on a particular word or particular phrase in the analog television signal.

217. (Previously presented) The apparatus of Claim 209, further comprising:  
a storage device switching module, wherein the storage device switching module switches to a second storage device for MPEG stream storage.

218. (Previously presented) The apparatus of Claim 209, wherein the receiver switches to a second analog television signal.

219. (Previously presented) The apparatus of Claim 209, wherein the selection module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the retrieving module retrieves the selected second particular video frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different destinations for display.

220. (Previously presented) The apparatus of Claim 209, wherein the selection module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the retrieving module retrieves the selected second particular video frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different areas within a display.

221. (Previously presented) The apparatus of Claim 209, wherein the storage device is a hard disk.

222. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

- a receiver that concurrently receives at least two analog television signals;
- an encoding module, wherein the encoding module encodes from the at least two analog television signals, MPEG streams that contain a plurality of video and audio frames and time stamps associated with the video and audio frames;
- an identification module, wherein the identification module identifies starting locations of video frames within the MPEG streams and time stamps associated with video frames;
- a storage device for concurrently storing the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage device additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;
- a user control command module, wherein the user control command module accepts a user control command;
- a video frame selection module, wherein the video frame selection module, in response to the user control command, selects a particular video frame from within a particular MPEG stream stored on the storage device using a time

stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage of the MPEG streams on the storage device;

an audio frame selection module, wherein the audio frame selection module selects a corresponding audio frame from within the particular MPEG stream that corresponds to the particular video frame;

a video frame retrieving module, wherein the video frame retrieving module retrieves the selected particular video frame using a stored starting location of the selected particular video frame;

an audio frame retrieving module, wherein the audio frame retrieving module retrieves the selected corresponding audio frame from the particular MPEG stream; and

a sending module, wherein the sending module sends the selected particular video frame and selected corresponding audio frame for playback.

223. (Previously presented) The apparatus of Claim 222, wherein the particular video frame is a video I-frame.

224. (Previously presented) The apparatus of Claim 222, wherein the retrieving module adjusts video frame rate delivery for display of additional video frames in response to the user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the user control command.

225. (Previously presented) The apparatus of Claim 222, wherein the retrieving module adjusts video frame rate delivery for display of additional video frames in response to a second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

226. (Currently Amended) The apparatus of Claim 222, wherein the video frame selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device using a time stamp associated with the selected particular video frame.

227. (Previously presented) The apparatus of Claim 222, wherein the extraction module extracts an MPEG stream based on a user control command.

228. (Previously presented) The apparatus of Claim 222, wherein the extraction module extracts an MPEG stream based on date and time.

229. (Previously presented) The apparatus of Claim 222, wherein the extraction module extracts an MPEG stream based on a particular word or particular phrase in the analog television signal.

230. (Previously presented) The apparatus of Claim 222, further comprising:  
a storage device switching module, wherein the storage device switching module switches to a second storage device for MPEG stream storage.

231. (Previously presented) The apparatus of Claim 222, wherein the receiver switches to a second analog television signal.

232. (Previously presented) The apparatus of Claim 222, wherein the video frame selecting module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the audio frame selecting module selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving module retrieves the selected second particular video frame; wherein the audio frame retrieving module retrieves the selected second corresponding audio frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different destinations for display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

233. (Previously presented) The apparatus of Claim 222, wherein the video frame selecting module, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the audio frame selecting module selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving module retrieves the selected second particular video frame; wherein the audio frame retrieving module retrieves the selected second corresponding audio frame; and wherein the sending module sends the selected particular video frame and the selected second particular video frame to different areas within a display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

234. (Previously presented) The apparatus of Claim 222, wherein the storage device is a hard disk.

235. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

receiving means for concurrently receiving at least two digital television streams;

extraction means for extracting from the at least two digital television streams,

MPEG streams that contain a plurality of video frames and time stamps associated with the video frames;

identification means for identifying starting locations of video frames within the

MPEG streams and time stamps associated with video frames;

storage means for concurrently storing the MPEG streams, starting locations of

video frames within the MPEG streams and time stamps associated with the

video frames, the storage ~~device~~ means additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within

each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

user control command means for accepting a user control command;

selection means for, in response to the user control command, selecting a particular

video frame from within a particular MPEG stream stored on the storage

~~device~~ means using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the

concurrent storage of the MPEG streams on the storage means;



retrieving means for retrieving the selected particular video frame using a stored  
starting location of the selected particular video frame; and  
sending means for sending the selected particular video frame for display.

236. (Previously presented) The apparatus of Claim 235, wherein the particular video frame is a video I-frame.

237. (Previously presented) The apparatus of Claim 235, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to the user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the user control command.

238. (Previously presented) The apparatus of Claim 235, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to a second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

239. (Currently Amended) The apparatus of Claim 235, wherein the selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device means using a time stamp associated with the selected particular video frame.

240. (Previously presented) The apparatus of Claim 235, wherein the extraction means extracts an MPEG stream based on a user control command.

241. (Previously presented) The apparatus of Claim 235, wherein the extraction means extracts an MPEG stream based on date and time.

242. (Previously presented) The apparatus of Claim 235, wherein the extraction means extracts an MPEG stream based on a particular word or particular phrase in the digital television stream.

243. (Currently Amended) The apparatus of Claim 235, further comprising:  
storage ~~device~~ means switching means, wherein the storage ~~device~~ means switching means switches to a second storage means for MPEG stream storage.

244. (Previously presented) The apparatus of Claim 235, wherein the receiving means switches to a second digital television stream.

245. (Previously presented) The apparatus of Claim 235, wherein the selection means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage device; wherein the retrieving means retrieves the selected second particular video frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different destinations for display.

246. (Currently Amended) The apparatus of Claim 235, wherein the selection means, in response to a second user command, selects a second particular video frame from a second

MPEG stream stored on the storage ~~device~~ means; wherein the retrieving means retrieves the selected second particular video frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different areas within a display.

247. (Previously presented) The apparatus of Claim 235, wherein the storage means is a hard disk.

248. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

receiving means for concurrently receiving at least two digital television streams;

extraction means for extracting from the at least two digital television streams,

MPEG streams that contain a plurality of video and audio frames and time stamps associated with the video and audio frames;

identification means for identifying starting locations of video frames within the

MPEG streams and time stamps associated with video frames;

storage means for concurrently storing the MPEG streams, starting locations of

video frames within the MPEG streams and time stamps associated with the

video frames, the storage ~~device~~ means additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within

each of the previously stored MPEG streams and time stamps associated with

the video frames within each of the previously stored MPEG streams;

user control command means for accepting a user control command;

video frame selection means for, in response to the user control command, selecting a particular video frame from within a particular MPEG stream stored on the storage ~~device~~ means using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage of the MPEG streams on the storage means;

audio frame selection means for selecting a corresponding audio frame from within the particular MPEG stream that corresponds to the particular video frame;

video frame retrieving means for retrieving the selected particular video frame using a stored starting location of the selected particular video frame;

audio frame retrieving means for retrieving the selected corresponding audio frame from the particular MPEG stream; and

sending means for sending the selected particular video frame and selected corresponding audio frame for playback.

249. (Previously presented) The apparatus of Claim 248, wherein the particular video frame is a video I-frame.

250. (Previously presented) The apparatus of Claim 248, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to the user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the user control command.

251. (Previously presented) The apparatus of Claim 248, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to a

second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

252. (Currently Amended) The apparatus of Claim 248 wherein the video frame selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage ~~device~~ means using a time stamp associated with the selected particular video frame.

253. (Previously presented) The apparatus of Claim 248, wherein the extraction means extracts an MPEG stream based on a user control command.

254. (Previously presented) The apparatus of Claim 248, wherein the extraction means extracts an MPEG stream based on date and time.

255. (Previously presented) The apparatus of Claim 248, wherein the extraction means extracts an MPEG stream based on a particular word or particular phrase in the digital television stream.

256. (Currently Amended) The apparatus of Claim 248, further comprising:  
storage ~~device~~ means switching means, wherein the storage ~~device~~ means switching means switches to a second storage means for MPEG stream storage.

257. (Previously presented) The apparatus of Claim 248, wherein the receiving means switches to a second digital television stream.

258. (Currently Amended) The apparatus of Claim 248, wherein the video frame selecting means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage ~~device~~ means; wherein the audio frame selecting means selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving means retrieves the selected second particular video frame; wherein the audio frame retrieving means retrieves the selected second corresponding audio frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different destinations for display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

259. (Currently Amended) The apparatus of Claim 248, wherein the video frame selecting means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage ~~device~~ means; wherein the audio frame selecting means selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving means retrieves the selected second particular video frame; wherein the audio frame retrieving means retrieves the selected second corresponding audio frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different areas within a display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

260. (Previously presented) The apparatus of Claim 248, wherein the storage means is a hard disk.

261. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

receiving means for concurrently receiving at least two analog television signals;

encoding means for encoding from the at least two analog television signals, MPEG streams that contain a plurality of video frames and time stamps associated with the video frames;

identification means for identifying starting locations of video frames within the MPEG streams and time stamps associated with video frames;

storage means for concurrently storing the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage ~~device~~ means additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

user control command means for accepting a user control command;

selection means for, in response to the user control command, selecting a particular video frame from within a particular MPEG stream stored on the storage ~~device~~ means using a time stamp stored on the storage device associated with the selected particular video frame essentially simultaneously with the concurrent storage of the MPEG streams on the storage means;

retrieving means for retrieving the selected particular video frame using a stored  
starting location of the selected particular video frame; and  
sending means for sending the selected particular video frame for display.

262. (Previously presented) The apparatus of Claim 261, wherein the particular video frame is a video I-frame.

263. (Previously presented) The apparatus of Claim 261, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to the user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the user control command.

264. (Previously presented) The apparatus of Claim 261, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to a second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

265. (Currently Amended) The apparatus of Claim 261, wherein the selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage device means using a time stamp associated with the selected particular video frame.

266. (Previously presented) The apparatus of Claim 261, wherein the extraction means extracts an MPEG stream based on a user control command.



267. (Previously presented) The apparatus of Claim 261, wherein the extraction means extracts an MPEG stream based on date and time.

268. (Previously presented) The apparatus of Claim 261, wherein the extraction means extracts an MPEG stream based on a particular word or particular phrase in the analog television signal.

269. (Currently Amended) The apparatus of Claim 261, further comprising:  
storage ~~device~~ means switching means, wherein the storage ~~device~~ means switching means switches to a second storage means for MPEG stream storage.

270. (Previously presented) The apparatus of Claim 261, wherein the receiving means switches to a second analog television signal.

271. (Currently Amended) The apparatus of Claim 261, wherein the selection means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage ~~device~~ means; wherein the retrieving means retrieves the selected second particular video frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different destinations for display.

272. (Currently Amended) The apparatus of Claim 261, wherein the selection means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage ~~device~~ means; wherein the retrieving means retrieves

the selected second particular video frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different areas within a display.

273. (Previously presented) The apparatus of Claim 261, wherein the storage means is a hard disk.

274. (Currently Amended) An apparatus for storage and display of multimedia data, comprising:

receiving means for concurrently receiving at least two analog television signals;

encoding means for encoding from the at least two analog television signals, MPEG streams that contain a plurality of video and audio frames and time stamps associated with the video and audio frames;

identification means for identifying starting locations of video frames within the MPEG streams and time stamps associated with video frames;

storage means for concurrently storing the MPEG streams, starting locations of video frames within the MPEG streams and time stamps associated with the video frames, the storage ~~device~~ means additionally containing a plurality of previously stored MPEG streams, starting locations of video frames within each of the previously stored MPEG streams and time stamps associated with the video frames within each of the previously stored MPEG streams;

user control command means for accepting a user control command;

video frame selection means for, in response to the user control command, selecting a particular video frame from within a particular MPEG stream stored on the

storage ~~device~~ means using a time stamp stored on the storage device  
associated with the selected particular video frame essentially simultaneously  
with the concurrent storage of the MPEG streams on the storage means;

audio frame selection means for selecting a corresponding audio frame from within  
the particular MPEG stream that corresponds to the particular video frame;

video frame retrieving means for retrieving the selected particular video frame using  
a stored starting location of the selected particular video frame;

audio frame retrieving means for retrieving the selected corresponding audio frame  
from the particular MPEG stream; and

sending means for sending the selected particular video frame and selected  
corresponding audio frame for playback.

275. (Previously presented) The apparatus of Claim 274, wherein the particular video frame is a video I-frame.

276. (Previously presented) The apparatus of Claim 274, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to the user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the user control command.

277. (Previously presented) The apparatus of Claim 274, wherein the retrieving means adjusts video frame rate delivery for display of additional video frames in response to a second user control command; and adjusts video frame retrieval direction from the particular MPEG stream in response to the second user control command.

278. (Currently Amended) The apparatus of Claim 274, wherein the video frame selection module ~~substitutes a second storage device for the storage device and~~ selects a particular video frame from within a particular MPEG stream stored on ~~the~~ a second storage ~~device~~ means using a time stamp associated with the selected particular video frame.

279. (Previously presented) The apparatus of Claim 274, wherein the extraction means extracts an MPEG stream based on a user control command.

280. (Previously presented) The apparatus of Claim 274, wherein the extraction means extracts an MPEG stream based on date and time.

281. (Previously presented) The apparatus of Claim 274, wherein the extraction means extracts an MPEG stream based on a particular word or particular phrase in the analog television signal.

282. (Currently Amended) The apparatus of Claim 274, further comprising:  
storage ~~device~~ means switching means, wherein the storage ~~device~~ means switching means switches to a second storage means for MPEG stream storage.

283. (Previously presented) The apparatus of Claim 274, wherein the receiving means switches to a second analog television signal.

284. (Currently Amended) The apparatus of Claim 274, wherein the video frame selecting means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage ~~device~~ means; wherein the audio frame selecting means selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving means retrieves the selected second particular video frame; wherein the audio frame retrieving means retrieves the selected second corresponding audio frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different destinations for display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

285. (Currently Amended) The apparatus of Claim 274, wherein the video frame selecting means, in response to a second user command, selects a second particular video frame from a second MPEG stream stored on the storage ~~device~~ means; wherein the audio frame selecting means selects a second corresponding audio frame from within the second MPEG stream that corresponds to the selected second particular video frame; wherein the video frame retrieving means retrieves the selected second particular video frame; wherein the audio frame retrieving means retrieves the selected second corresponding audio frame; and wherein the sending means sends the selected particular video frame and the selected second particular video frame to different areas within a display along with their respective selected corresponding audio frame and selected second corresponding audio frame.

286. (Previously presented) The apparatus of Claim 274, wherein the storage means is a hard disk.